1   **Remarks**

The amendments to the Specification and claims

Examiner will immediately see that the amendment to the *Abstract* adds no new matter and that the amendments to the claims are fully supported by the Specification and claims as originally

5   filed.

The objection to the Abstract

The *Abstract* as amended has fewer than 150 words and the amendment has thus overcome the objection.

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The objections to claims 7-8, 36, 63, and 56

The second instances of claims 7 and 8 have now become new claims 58 and 59 and the typographical errors in claims 36, 53, and 56 have been corrected.

15   **The rejections of claims 16 and 27 under 37 C.F.R. 112, 2. par.**

Applicants have accepted Examiner's suggestions for amending the claims to overcome the rejections.

The rejection of claims 1-57 under 35 U.S.C. 101 as directed to non-statutory subject
20   **matter**

As set out by Examiner, the rejection applies to claims addressed to data structures. Applicants' independent claim 1 is addressed to "Apparatus in a database management system for performing a job which transfers a set of database objects into or out of the database system",

25   and not to a data structure; consequently, Examiner's rejection cannot apply to it. The methods of claims 39 and   43 are also not addressed to data structures, and the rejection cannot apply to those claims either. The only independent claim which can in any way be taken to set forth a "data structure" is claim 36, which is addressed to "a set of files for transferring a set of database objects into a database management system". According to the *Interim Guidelines for*

30   *Examination of Patent Applications for Patent Subject Matter Eligibility,* a claim is not addressed to an abstract idea

> if the claimed invention physically transforms an article or physical object to a
> different state or thing, or if the claimed invention otherwise produces a useful,
> concrete, and tangible result.

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Both cases apply to claim 36. When a set of objects contained in a file are transferred into a database management system, the objects are transformed from objects in a file to objects in a database system. In the file, the objects are not queryable; after transfer into the database system, they are. Further, transferring a set of objects from a set of files into a database

5   management system is a useful, concrete, and tangible result. Prior to the transfer, the objects in the files were not part of the database management system; after the transfer, they are.

Because claims 1, 39, and 43 cannot be construed as being data structures, Examiner's rejection of those claims under 35 U.S.C. 101 is without basis; because claim 36 sets forth both a

10   transformation and a "useful, concrete, and tangible result", the rejection of claim 36 under 35 U.S.C. 101 is also without basis. Further, if an independent claim is addressed to patentable subject matter, all of the claims dependent from the independent claim must be addressed to patentable subject matter as well; consequently, there is no basis for the rejection of *any* of claims 1-57 or any of the new claims 58-65 under 35 U.S.C. 101.

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Patentability of claim 1-15, 23-35, 39-43, and 50-55 as amended
These claims were rejected as being anticipated by Oracle 9i SQL. The rejection of claim 1 is typical: Examiner construes the claimed "control database object" to be *any* kind of database object and treats it as being anticipated by the SQL CREATE PROCEDURE statement, which

20   creates a stored SQL/PL procedure object. Applicants' attorney doubts whether a stored SQL/PL procedure can be said to "represent the job", as required by the claim, but in order to make it perfectly clear that the "control database object" is neither an SQL/PL procedure object nor a query written in SQL, Applicants have amended their claim 1 so that the control database object is now a "queryable control database object", which immediately differentiates it from the

25   unqueryable SQL/PL procedures and the unqueryable SQL queries.

Applicants have further amended claim 1 to clearly distinguish the control database object from Rivlin's file attribute table. As amended claim 1 now sets forth, the queryable control data object "specifies the set of objects". The objects are of course database objects. As is clear

30   from column 3, lines 11-32 and TABLE 1 of Rivlin, Rivlin's file attribute table specifies a set of files, not a set of database objects. Independent claims 36 and 43 have been amended in the same fashion as independent claim 1. The amendment of these independent claims thus overcomes both the rejection of claims 1-15, 23-35, 43, and 50-55 as anticipated by Oracle 9i

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SQL and the rejection of claims 16-22, 44-49, and 56-57 as obvious over the combination of Oracle 9i SQL and Rivlin.

Patentability of the claims dependent from claims 1, 36, or 43

5   These dependent claims are of course patentable because they are dependent from patentable claims. They are, however, also patentable over the references in their own rights. Examiner rejects many of the dependent claims on the basis of the Oracle 9i SQL reference. The difficulty with all of these rejections is that SQL deals only with operations on objects within a database management system; it cannot be used to "transfer a set of database objects into or out of the

10   database management system" (claim1), which is the operation with which Applicants' claims are concerned. Consequently, the structures of the SQL language disclosed in Oracle 9i SQL cannot anticipate limitations in Applicants' claims. Others of the claims are rejected on the basis of the Oracle 9i User-managed backup and recovery guide. Applicants are however not claiming backup and recovery of a database system, but rather techniques for "transferring

15   database objects into or out of the database management system", and it is with regard to such transfers that Applicants claim interaction between the entity and the transfer, attachment and detachment from the transfer, obtaining a current status of a transfer, and stopping and restarting the transfer.

20   **Patentability of claims 39-42**

A preferred embodiment of the invention of these claims is disclosed at page 35, line 17 through page 37, line 30 of the Specification as filed. An overview of the embodiment may be found at page 35, line 29 through page 36, line 4. As set forth at the cited location, the Data Pump has three transfer techniques available to it, two for ordinary data, namely external tables and direct

25   path, and one for metadata. The Data Pump uses the metadata for an object's type to determine which of the transfer techniques to use to transfer the object. The foregoing is claimed in straightforward fashion in claim 39:

         39. (currently amended) A method of transferring database objects to a
         destination, each database object having metadata that defines the database
30   object's type and
         the method comprising the steps of:
                obtaining metadata for the object type <u>and</u> using the metadata to make a
         determination of the composition of the objects of the type;
                selecting a transfer technique for objects belonging to the type from a
35   plurality thereof according to the determination; and

transferring the objects belonging to the type according to the selected transfer technique.

At page 12 of his Office action, Examiner rejects independent claim 39 as anticipated by Oracle

5   9i's metadata views and the SQL SELECT statement. A rejection on the basis of anticipation of course requires that the reference that is the basis for the rejection show every limitation of the claim under rejection. With regard to claim 39, while Oracle 9i provides metadata views for its metadata tables, it does not disclose that the metadata in the views can be used in a method step to "make a determination of the composition of the objects of the type" or that the

10   "determination" can be used to "select[] a transfer technique for objects belonging to the type".

Examiner finds the "selecting" step to be disclosed by the SQL SELECT statement. The Oracle 9i SQL reference describes SELECT as follows:

> Use a SELECT statement or subquery to retrieve data from one or more tables,
15   object tables, views, object views, or materialized views. (18-4)

SELECT consequently selects data from table objects, not "a transfer technique", as required by the claim. Further, SELECT has nothing whatever to do with "transferring objects to a destination", as required by the last step of the claim. Consequently, Oracle 9i SQL does not

20   disclose all of the limitations of claim 39 and the rejection under 35 U.S.C. 102(a) is without basis.

Dependent claims 40-42 are of course patentable because claim 39 is patentable; they are however also patentable in their own rights over Oracle 9i SQL. Examiner rejects these claims

25   on the basis of the SQL `parallel_clause`, which is described in the reference as follows:

> The parallel_clause lets you parallelize the creation of a database object and set
> the default degree of parallelism for subsequent queries of and DML operations
> on the object. (7-49)

30   This of course has nothing to do with "transferring database objects to a destination", as required by claim 39.

Conclusion

Applicants have amended the *Abstract* so that it now has fewer than 150 words, have amended

35   claims 7-8, 16, 27, 36, 53, and 56 to overcome Examiner's objections thereto or rejections under

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35 U.S.C. 112, 2. par.   Applicants have additionally amended claims 3-5 as required by the cancellation of claim 2, supplied a missing "and" in claim 39, and added Beauregard claims dependent from claims 1, 36, 39, and 43.   Applicants have finally amended independent claims 1, 36, and 43 to better distinguish them from the Oracle 9i SQL and Rivlin references and have

5   shown how the amended claims overcome the rejections.   The amended claims are fully supported by the Specification as filed.   Applicants have thus been fully responsive to Examiner's Office action of 4/7/06 as required by 37 C.F.R. 1.111(b) and respectfully request that Examiner continue the examination and allow the claims as amended, as provided by 37 C.F.R. 1.111(a).

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A check for $300 for the six dependent claims added in the amendment accompanies this response; please charge any additional fees required for the response or refund any overpayments to deposit account number 501315.

15   Respectfully submitted,

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